REMARKS

Applicant would like to thank the Examiner for the careful consideration the Examiner has given the present application. Claims 11-34 are currently pending in the present application. In this Amendment "C", Applicant has amended claims 11, 12, 16, 17, 23, 27 and 33, and has canceled claim 22. Reconsideration of the application in its current format is hereby requested.

In the Office action, the Examiner has withdrawn claims 18-21, 25, 26 and 29-32 from consideration. In addition, the Examiner has rejected claims 11-17 and 33-34 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,025,093 to Cotter et al. The Examiner has further rejected claims 22-24 and 27-28 under 35 U.S.C. §103(a) as being unpatentable over the Cotter et al. patent in view of U.S. Patent No. 4,282,567 to Voigt. For at least the reasons set forth below, Applicant traverses these rejections.

The Cotter et al. patent discloses an inductance device comprising an E-shaped structure 12 having ends 13 and middle portion 14, and an I-shaped side 12a. The I-shaped side 12 has a varying width, thereby forming an air gap between the E-shaped structure 12 and the I-shaped side 12 having a variable width. In rejecting the claims, the Examiner presumably finds the E-shaped structure 12 of the Cotter et al. patent as corresponding to the "first stack of first laminations" recited in independent claim 11 and the "first section" recited in independent claim 17, and the I-shaped side 12 of the Cotter et al. patent as corresponding to the "second stack of second laminations" recited in independent claim 11 and the "second section" recited in independent claim 17. Although the I-shaped side 12 of the Cotter et al. patent falls to have "second laminations each having the same predetermined shape", as required by claim 11 and fails to have a first section with "a stepped end",

as required by claim 17, the Examiner states: "It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the same predetermined shape use on the second stack instead of the first stack to produce the desired non-linear inductance characteristics since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167." The Examiner, however, does not discuss how the facts of the In re Einstein case are similar to the facts in the subject application. Indeed, the Examiner does not even mention the facts of the In re Einstein case. The In re Einstein case involved a mechanical device, namely a grinder wheel, wherein physical, mechanical parts were reversed from a prior art device. In contrast, the present application relates to an electrical device wherein components are configured differently from components in the prior art. There is no reversal of mechanical parts, as there was in the in re Einstein case. Thus, the facts of the in re Einstein case are very different from the facts concerning the present application. Therefore, it is apparent that the Examiner is relying on the In re Einstein case merely as a basis for a per se rule of obviousness.

The *In re Einstein* case was decided in 1931, which was 21 years *before*Section 103 was even enacted. Numerous courts have cautioned against using such old cases as bases for *per se* rules of obviousness. For example, in *Nickola v.*Peterson, 580 F.2d 898, 198 USPQ 385 (6th Cir. 1978), *cert. denied*, 440 U.S. 961 (1979), the 6th Circuit stated:

Difficulties since 1952 have centered on inapt references to old cases calling on courts to find 'invention', and on judicial efforts to supply semantic mechanisms as aids in defining 'obviousness'. Because inventions differ so widely, application of all such mechanisms to all inventions, as rules of law, would risk destruction of the entire statutory scheme......Exercise of the

judicial process, in determining whether an invention has met the nonobviousness requirement, turns on application of the entire statutory provision, 35 U.S.C. §103, to all relevant evidence of record.

The Federal Circuit has flatly come out and stated that "per se rules do not govern the nonobviousness inquiry." *Torpharm, Inc. v. Ranbaxy Pharmaceuticals, Inc.*, 336 F.3d 1322, 1329 n.6 (Fed. Cir. 2003). In the case *In re Ochai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995), the Federal Circuit more specifically addressed the use of per se rules by patent examiners, wherein the Federal Circuit stated (with emphasis added):

The use of per se rules, while undoubtedly less laborious than a searching comparison of the claimed invention—including all its limitations -- with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed they have been sanctioned by the Board as well. But reliance on per se rules of obviousness is legally incorrect and must cease.

Based on the foregoing, it is clear that the Examiner's reliance on the *in re Einstein* case to reject the subject claims is <u>not</u> in accord with established patent law.

Applicant submits that under established patent law, a prima facie case of obviousness can only be established if there is some suggestion or motivation, either in the references or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. In a situation where only one reference is used, such as the Examiner's rejection of claims 11-17 and 33-34, there must be "a showing of a suggestion or motivation to modify the teachings of that reference to the claimed invention in order to support

the obviousness conclusion". In re O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673,1680 (Fed. Cir. 1988). Since the Examiner failed to provide a proper motivation or suggestion to modify the Cotter et al. patent, in the manner the Examiner did, Applicant submits that the Examiner failed to establish a prima facie case of obviousness in rejecting claims 11-17 and 33-34 over the Cotter et al. patent, and claims 22-24 and 27-28 over the Cotter et al. patent in view of the Voigt patent.

Even if the inductor of the Cotter et al. patent was modified as suggested by the Examiner, the resulting inductor would fail to meet the limitations of amended independent claims 11 and 17. In the Cotter et al. patent, none one of the air gaps in the inductor extend "the entire depth of the second stack in the stacking direction of the second stack", as is presently recited in amended independent claim 11. In addition, in the Cotter et al. patent, none of the air gaps comprise "a first step portion with a first width, a second step portion with a second width end a third step portion having the first width" wherein "the second step portion is disposed between the first and third step portions", as is presently recited in amended independent claim 17.

The limitations of independent claim17 recited above were formerly recited in dependent claim 22, which has now been canceled. As set forth above, the Examiner rejected claim 22 under 35 U.S.C. §103(a) as being unpatentable over the Cotter et al. patent in view of U.S. Patent No. 4,282,567 to Voigt. In making this rejection, the Examiner states (with emphasis added): "Volgt discloses an air gap formed in a magnetic core structure being configured with first, second and third steps wherein the first and third steps have an equal width greater than that of the second step [figure].... It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the configuration of Voigt in Cotter et al. in order to provide even flux distribution."

Initially, Applicant notes that the device of the Volgt patent is a transformer, whereas the device of the Cotter et al. patent is a choke. Applicant also notes that the device of the Volgt patent does not have a core formed from laminations. Rather, the device of the Volgt patent has a solid ferrite core with a cylindrical side wall that fully encloses opposing spaced-apart annular bases 8, 20. The base 20 has a stepped mesa which helps form a stepped air gap, which is cited by the Examiner as showing the first, second and third step portions previously recited in claim 22 and now recited in amended independent claim 17.

The Examiner asserts that the motivation to combine the three step portions of the Voigt patent with the choke of the Cotter et al. patent is to "provide even flux distribution". This motivation, however, cannot be found anywhere in the Cotter et al. patent or the Voigt patent, either expressly or implicitly. In fact, the motivation supplied by the Examiner runs directly counter to the invention of the Cotter et al. patent. In order to provide even flux distribution, one skilled in the art would simply provide a conventional uniform air gap rather than a stepped air gap. The choke of the Cotter et al., however, relies on an uneven flux distribution to provide its benefits. In this regard, see column 2 lines 29-34 of the Cotter et al. patent, which states, in part, and with emphasis added: "When a small D.C. current is passed through the winding 15, the magnetic flux is substantially confined to the core section a". Accordingly, Applicant respectfully submits that the motivation enunciated by the Examiner is completely absent from the cited references and, in fact, runs counter to their teachings. In this regard, Applicant notes that in an obviousness determination, the factual question of motivation to combine prior art is material to patentability, and cannot be resolved on subjective belief and unknown authority. In re Sang Su Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed Cir. 2002)

Based on the foregoing, Applicant submits that there is no motivation or suggestion whatsoever to combine the Voigt patent with the Cotter et al. patent, as the Examiner has done. This lack of motivation or suggestion is especially significant, considering the significant differences between the choke of the Cotter et al. patent and the transformer of the Voigt patent. Since there is no motivation or suggestion to combine the Voigt patent with the Cotter et al. patent, Applicant submits that independent claim 17 is patentable over the Cotter et al. patent and the Voigt patent, individually or in combination.

For at least the reasons set forth above, Applicant submits that independent claims 11 and 17 and, thus dependent claims 12-16, 18-21 and 23-34 are patentable over the cited references.

Based on the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 050877.

Respectfully submitted,

ABB Inc. and ABB Ov

Paul R. Katterfe, Reg. No. 36563

November 24, 2004 c/o ABB Inc. 29801 Euclid Avenue-4U6 Wickliffe, Ohio 44092-2530 (440) 585-7968